AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A process of growing a thin film of Al_2O_3 on a substrate having a surface in a reaction chamber by a sequential vapor deposition process comprising a plurality of cycles, each cycle comprising, in order:

exposing the substrate in the reaction chamber to gaseous trimethyl aluminum (TMA), such that more than one monolayer of TMA forms on the substrate surface;

stopping provision of the gaseous TMA;

removing gaseous TMA from the reaction chamber;

exposing the substrate in the reaction chamber to atomic oxygen; and

removing atomic oxygen from the reaction chamber;

wherein in each cycle more than one monolayer of Al_2O_3 is formed.

2. (Previously Presented) The process of Claim 1, wherein in each cycle a layer of Al_2O_3 3 Å thick is formed.

3. (Previously Presented) The process of Claim 1, wherein the atomic oxygen is generated remotely in a radical generator.

4. (Original) The process of Claim 1, wherein the process is carried out at room temperature.

5. - 20. (Cancelled)

21. (New) The process of Claim 1, wherein in exposing the substrate to gaseous TMA a portion of the gaseous TMA in the reaction chamber condenses on the substrate surface.